

REMARKS

Claims 1-20 were originally filed in the present application.

Claims 1-20 are pending in the present application.

Claims 1-20 were rejected in the October 25, 2007 Office Action.

Claims 1-20 remain in the present application.

Reconsideration of the claims is respectfully requested.

I. Double Patenting Rejection

In the October 25, 2007 Office Action, the Examiner provisionally rejected Claims 1-20 on the ground of non-statutory double patenting over claims 1-24 of co-pending Application No. 10/431,770 (hereinafter "the '770 Application"). This rejection is respectfully traversed.

Obviousness-type double patenting requires rejection of an application claim when the claimed subject matter is *not* patentably distinct from the subject matter claimed in a commonly owned patent, when the issuance of a second patent would provide unjustified extension of the term of the right to exclude granted by a patent. MPEP §804, p. 800-21 (8th ed., rev. 5, August 2006). A double patenting rejection of the obviousness-type is analogous to the non-obviousness requirement of 35 U.S.C. §103 except that the patent principally underlying the double patenting rejection is not considered prior art.

The Applicants respectfully disagree with the double-patenting rejection and recite below independent Claim 17 of the current application and independent Claim 1 of the '770 Application, which the Examiner has cited in the double-patenting rejection:

17. For use in a router comprising a switch fabric and a plurality of routing nodes coupled to the switch fabric, each of the routing nodes capable of transmitting data packets to, and receiving data packets from, external devices and transmitting data packets to, and receiving data packets from, other routing nodes via the switch fabric, a method of distributing data packets for forwarding comprising the steps of:

receiving a plurality of data packets in a first network processor of a first routing node, the first network processor comprising N microengines capable of forwarding the data packets, each of the microengines capable of executing a plurality of threads that perform forwarding table lookup operations;

allocating a first data packet to a first thread in each of the N microengines;
and

after said first step of allocating, allocating a second data packet to a second thread in each of the N microengines. (emphasis added)

Claim 1 of the '770 Application:

1. For use in a communication network, a router capable of transmitting data packets to and receiving data packets from N interfacing peripheral devices, said router comprising: a first packet processor capable of receiving a first data packets from the physical medium device (PMD) module coupled to one of said N interfacing peripheral devices and determining if a format of said first data packet is one of IPv4, IPv6 and MPLS, wherein said first packet processor determines a destination device of said first data packet by looking up said device destination device in a unified forwarding table containing destination devices for data packets in IPv4 format, IPv6 format, and MPLS format. (emphasis added)

The '770 Application discloses and teaches a single router with "N interfacing peripheral devices". Furthermore, only a single first network processor is coupled to one of the "N interfacing peripherals" to determine "destination device of said first packet." In contrast, the current application discloses and teaches "N microengines", namely, N network processors, each of which is capable of "forwarding the data packets." The Applicants respectfully assert that the N interfacing peripheral devices are distinctly different from N microengines. While an interfacing peripheral is a physical medium device, each of the N microengines is a packet forwarding engines that is capable of forwarding packets in parallel with the other microengines.

Accordingly, the Applicants respectfully request the Examiner to withdraw the double patenting rejection.

II. 102(e) Rejection

In the October 25, 2007 Office Action, the Examiner rejected Claims 1-16 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,154,902 to *Sikdar* (hereafter, “Sikdar”). In the October 25, 2007 Office Action, the Examiner rejected Claims 1-20 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,107,329 to *Schroder et al.* (hereafter, “Schroder”).

The Applicants respectfully disagree with the 102(e) rejection and direct the Examiner’s attention to independent Claim 1 with the unique and novel limitations emphasized:

1. A router for interconnecting external devices coupled to said router, said router comprising:
 - a switch fabric; and
 - a plurality of routing nodes coupled to said switch fabric, wherein each of said plurality of routing nodes comprises packet processing circuitry capable of transmitting data packets to, and receiving data packets from, said external devices and further capable of transmitting data packets to, and receiving data packets from, other ones of said plurality of routing nodes via said switch fabric, wherein said packet processing circuitry comprises a first network processor comprising:
 - N microengines capable of forwarding said data packets, each of said microengines capable of executing a plurality of threads that perform forwarding table lookup operations; and
 - workload distribution circuitry capable of distributing data packets to said N microengines for forwarding.

The Skidar reference teaches multiple interfacing cards: “at the same time as the described operations are occurring, other serdes channels are transmitting the others of N=8 strands from ingress traffic manager Mi0’s queue to egress traffic manager Me12’s queue, using the others of N

active switch fabric cards. Manager Me12 recombines the N express strands to reconstruct the data in the sequence it existed in the ingress manager's queue". (Sikdar, at col. 12, line 50-57).

Examiner has specifically pointed out in the "Response to Arguments" section of the Office Action dated 10/25/07 that there is only a single processing engine in the Sikdar reference (emphasis added): "Examiner points out that the prior art taught a switch fabric with the packet processing engine, traffic manager and a plurality of input parallel channels" [Sikdar, Fig 5, col 8 lines 1-60]. It is clearly that the processing engine and traffic manager capable of control the plurality of parallel channels or threads that perform forwarding the packets via the link list." In contrast, the Applicant cited a limitation of multiple processing engines: "N microengines capable of forwarding said data packets, each of said microengines capable of executing a plurality of threads that perform forwarding table lookup operations". The limitation of multiple processing engines, each "capable of forwarding said data packets", is not taught, disclosed or suggested by the Skidar reference.

Furthermore, the Schroder reference teaches multiple threads that can execute in parallel: "Shown within the BGP service is its IP (Information Processing) interface and tasks and threads that send request messages to other services – tasks being active executable images that execute the code from a module and threads being the concurrent lines of execution within a task, wherein activation of a service causes the tasks and threads to be started and the module code to begin executing the task." (Col. 3, line 46-51). The Applicant respectfully asserts that multiple threads are not the same as or analogous to, the claimed N microengines, each capable of executing multiple threads and forwarding packets in parallel.

In sum, the prior art references cited by the Examiner do not teach or suggest the unique and

novel limitations recited in independent Claim 1. Independent Claims 9 and 17 recite limitations that are analogous to the limitations cited in the Claim 1, and therefore they are unique and novel over the cited prior art reference. Accordingly, independent Claims 9, and 17 are novel and unique over the cited prior art references. Additionally, dependent Claims 2-8, 10-16, and 18-22 depend from independent Claims 1, 9, and 17, respectively, and contain all of the unique and novel limitations recited in Claims 1, 9 and 17. This being the case, these dependent claims are also patentable over the cited prior art references.

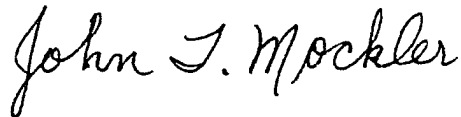
SUMMARY

For the reasons given above, the Applicants respectfully requests reconsideration and allowance of the pending claims and that this application be passed to issue. If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at *jmockler@munckbutrus.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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